# NEW SPECIES AND VARIETIES FROM THE BAHAMAS, CAICOS AND TURKS ISLANDS

## Donovan S. Correll

As Noted in an earlier paper (Jour. Arnold Arb. 58: 40–51. 1977), my extensive field explorations in the Bahamas, Caicos and Turks Islands continue to yield new entities. The following are the latest of these. Holotypes have been placed in the Herbarium of the Arnold Arboretum, Harvard University; isotypes are in the Fairchild Tropical Garden Herbarium and elsewhere as indicated.

### GRAMINEAE

Dichanthelium caerulescens (Hack. ex Hitchc.) Correll, comb. nov.

Panicum caerulescens Hack. ex Hitchc. Contr. U. S. Natl. Herb. 12: 219. 1909.

Gould, in Brittonia 26: 59. 1974, elevated the subgenus Dichanthe-Lium Hitchc. & Chase in *Panicum* L. to the status of genus. In following Gould, with whom I agree, it is necessary to make the present combination for my forthcoming *Flora*.

#### PORTULACACEAE

## Portulaca minuta Correll, sp. nov.

FIGURE 1.

Perennis. Caudex incrassatus plerumque fusiformis usque 2 cm. longus et 5 mm. crassus. Caules plures e basi, erecto-patentes, succulenti, raro plus quam 3 cm. longi. Folia opposita, obovata vel obovato-elliptica, plana sed carnoso-crassa. Flores solitarii ad apicem caulium et ramorum. Sepala 2, suborbicularia, concava. Petala 4, aurea, obovato-cuneata, emarginata, circa 3 mm. longa. Stamina 8, longitudine irregularia. Stylus trilobus. Fructus circa 3 mm. longus et 2 mm. latus.

Type. Bahamas. Great Exuma, in shallow soil of depressions in thinly coppice-covered rock flats, Hooper's Bay area west of George Town; plants succulent, leaves obovate, flowers golden yellow, July 8, 1978, D. S. Correll 49976 (A, holotype; F, FTG, MO, NY, US, isotypes).

Plant perennial from a thickened, usually fusiform rootstock to about 2 cm. long and 5 mm. thick; stems several from the base, erect-spreading, succulent, rarely more than 3 cm. long. Leaves opposite; petiole to about 1 mm. long; blade obovate to obovate-elliptic, flat but fleshy-thickened, to about 5 mm. long and 3 mm. wide above the middle, minutely glandular, usually with a few short bristles in the axils. Flowers solitary at apex of stems and branches. Sepals 2, suborbicular, concave, about half as long

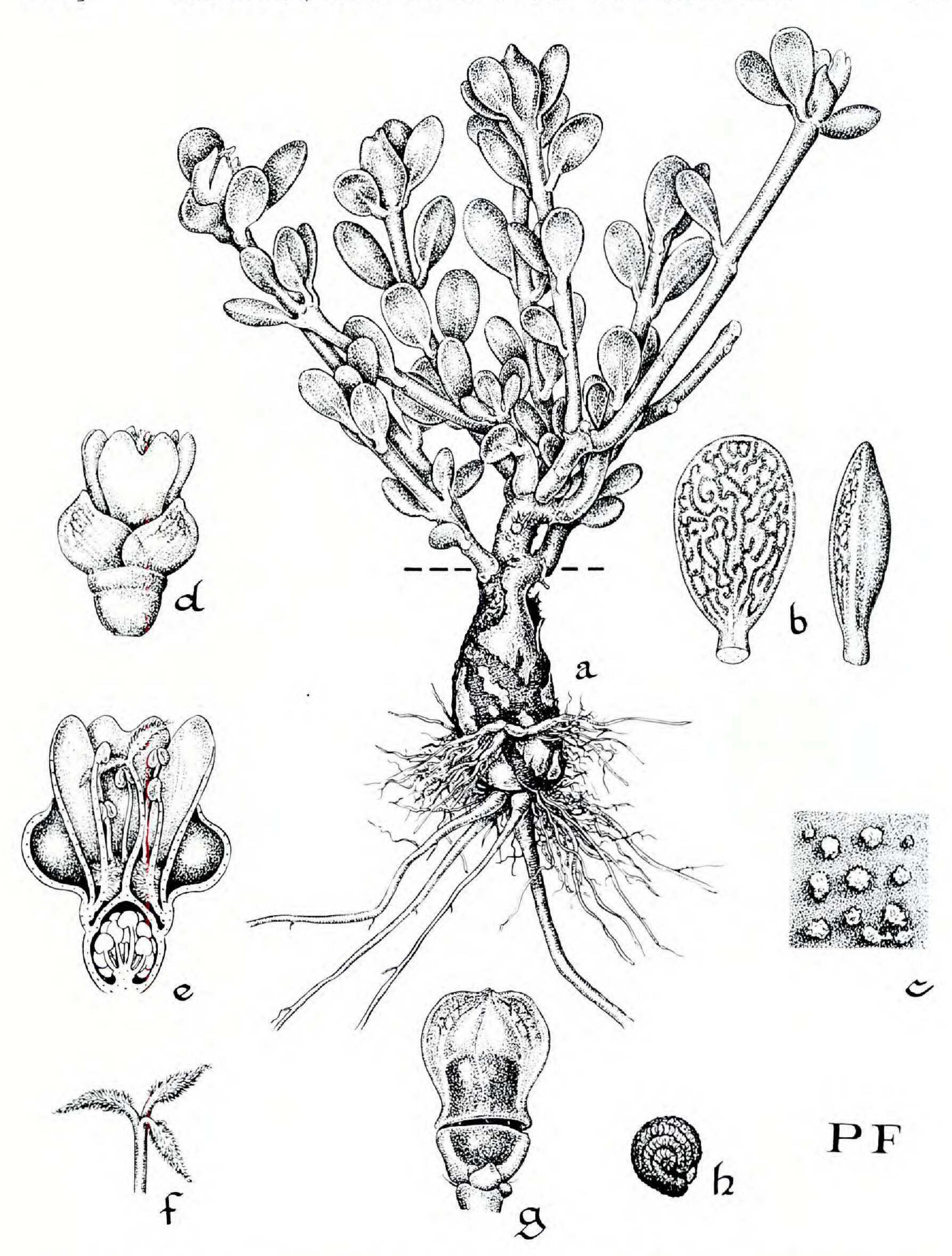


FIGURE 1. Portulaca minuta: a, habit,  $\times$  3; b, leaf, top and side views, showing pattern of chlorophyll-bearing cells just below surface of upper side of leaf,  $\times$  7; c, exudate from glands on surface of leaf,  $\times$  30; d, flower, natural position,  $\times$  6; e, flower, longitudinal section,  $\times$  9; f, stylar lobes,  $\times$  12; g, fruit,  $\times$  6; h, seed,  $\times$  18. Drawn by Priscilla Fawcett.

as petals, veiny. Petals 4, golden yellow, broadly obovate-cuneate, emarginate, about 3 mm. long. Stamens 8, irregular in length; filaments pubescent below middle. Stylar lobes 3, puberulent. Fruit about 3 mm. long

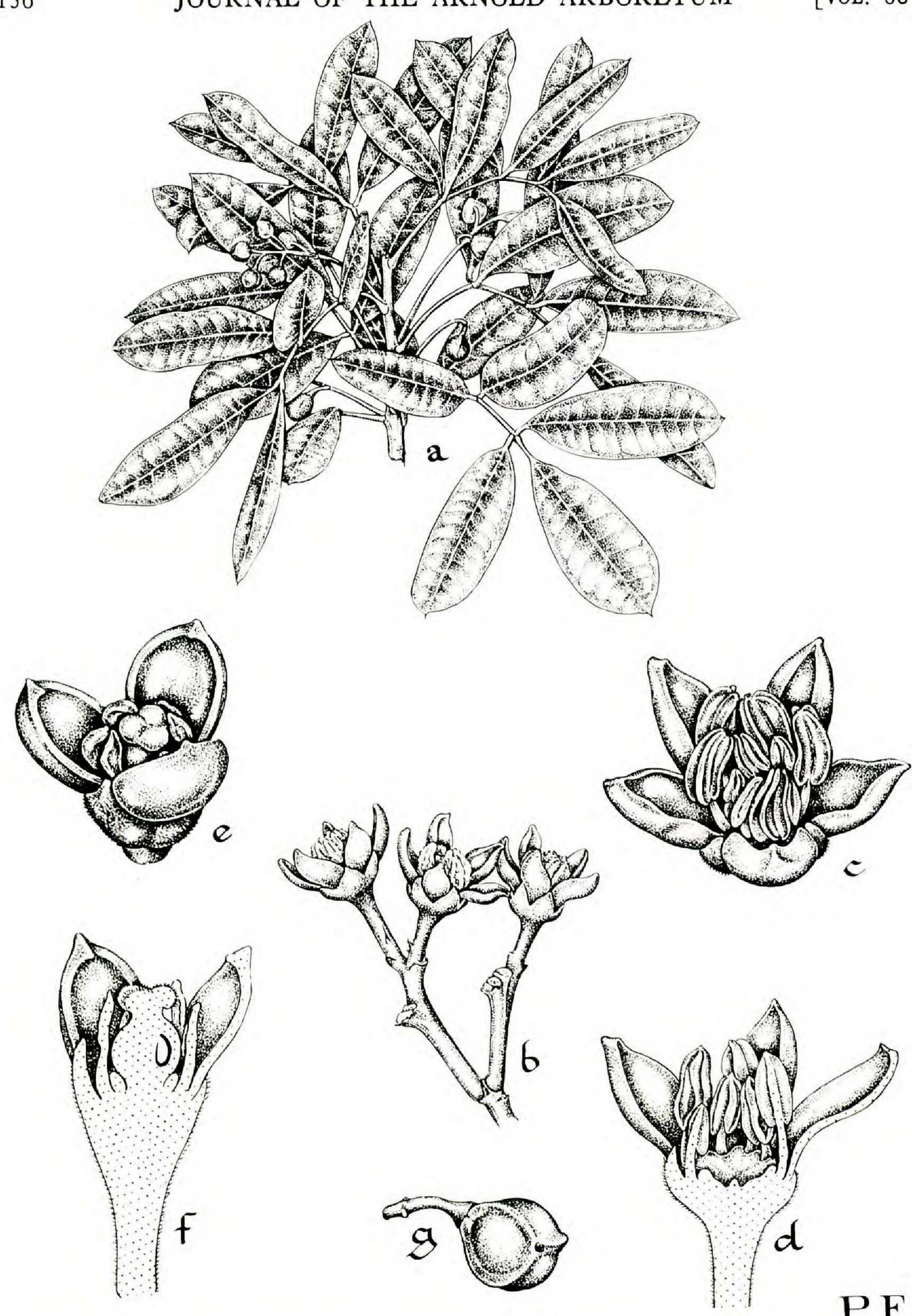


FIGURE 2. Bursera frenningae: a, fruiting branch,  $\times$  ½; b, part of male inflorescence,  $\times$  3; c, male flower, natural position,  $\times$  9; d, male flower, longitudinal section,  $\times$  9; e, female flower, natural position,  $\times$  9; f, female flower, longitudinal section,  $\times$  9; g, fruit,  $\times$  1.5. Drawn by Priscilla Fawcett.

and 2 mm. wide, dehiscent below the middle to leave a cup 1 mm. deep, the cap miterlike. Seeds black, iridescent, pebbly, about 0.5 mm. across.

The abbreviated stems from a tuberous rootstock, opposite leaves, and three stylar lobes are distinctive features of this species.

## BURSERACEAE

## Bursera frenningae Correll, sp. nov.

FIGURES 2, 3.

Frutex dioecious expansus, truncis multis, raro arbor parva, typice ramosissimus, cortice testacea vel rubiginosa, saepe aliquantum lamellata. Folia 3–5-foliolata (raro 7-foliolata); foliola crassichartacea, aliquantum late oblongo-elliptica vel elliptico-oblanceolata, rotundata vel obtusa saepe ad apicem apiculata, usque ad 5.5 cm. longa et 2.5 cm. lata. Inflorescentiae paniculas racemosas formantes; pedunculi florum masculorum multo longiores quam pedunculi florum femineorum; pedunculus fructus crassus et rigidus, raro plus quam 3 cm. longus; fructus suborbicularis, circa 7 mm. diametro.

Type. Bahamas. Great Exuma, in coastal rocky thicket between Mt. Thompson and Farmer's Hill, July 8, 1978, D. S. Correll 49984 (A, holotype; F, FTG, NY, US, isotypes).

Multitrunked, dioecious, spreading shrubs or rarely small trees to about 4.5 meters tall, typically much branched, the bark reddish or reddish brown and often somewhat flaky; twigs with reddish brown bark. Leaves oddpinnate; petiole to about 3 cm. long; blade to 7 cm. long; rachis commonly angularly arcuate. Leaflets 3 or 5, rarely 7, thick-chartaceous, rather broadly oblong-elliptic to elliptic-oblanceolate, rounded to obtuse and often apiculate at the apex, rounded to cuneate at the oblique base, 3-5.5 cm. long, 1.5-2.5 cm. wide; lateral leaflets subsessile to shortly petiolulate; terminal leaflet with a petiolule to about 1 cm. long. Inflorescences racemose-paniculate, 2.5-5 cm. long, puberulent, those of the male flowers much the longer; peduncle typically thick and rigid (especially in fruit), 1-3.5 cm. long; pedicels stout. Male flowers with pedicels 2-3 mm. long; calyx about 1 mm. long, with 5 minute, triangular lobes; petals 5, yellowish green, elliptic, obtuse to subacute, erect to erect-spreading, about 2 mm. long; stamens as many as 8. Female flowers with pedicels 1-1.5 mm. long; calyx 1-1.5 mm. long, with 3 rather broadly triangular lobes; petals 3, yellowish green, broadly elliptic, obtuse, erect to erect-spreading, about 2 mm. long and 1 mm. wide; infertile stamens usually 6; ovary sessile, with a sessile 3-lobed stigma; fruiting peduncle stout and rigid, rarely more than 3 cm. long; fruit with a pedicel about 3 mm. long, suborbicular, 3celled, dehiscent, reddish brown, about 7 mm. long, bony.

This multitrunked, reddish-barked, usually shrubby plant has previously been included in the typically more southern *Bursera inaguensis* Britton. That small tree, however, characteristically has a solitary, often somewhat swollen trunk with tight, grayish bark. Its more slender petioles and peduncles are also much longer than those in our plant, and its leaflets are linear-oblong and somewhat acute.

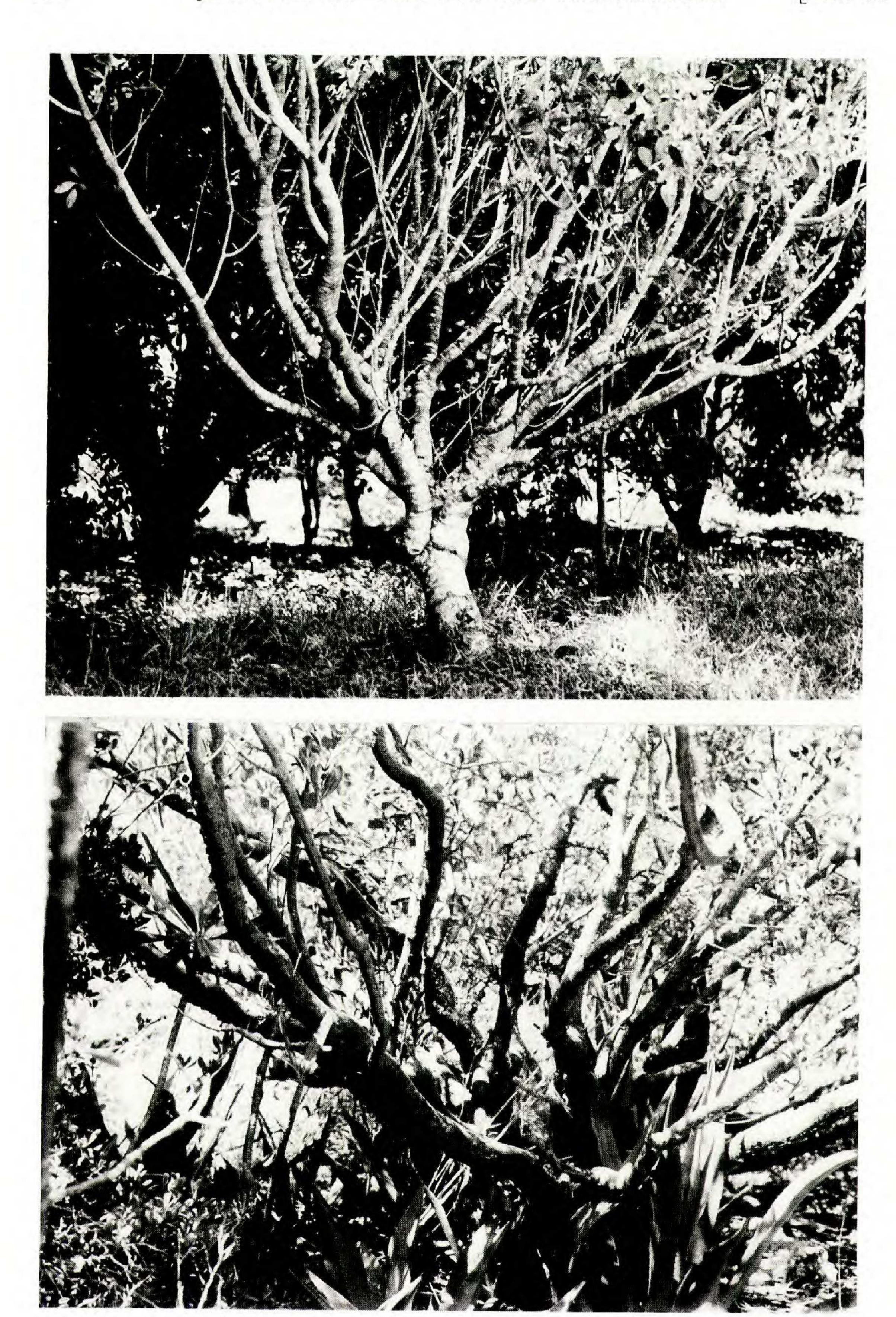


FIGURE 3. Above: Bursera inaguensis, dwarf tree from Great Inagua under cultivation at Fairchild Tropical Garden, showing gray-barked single trunk. Below: Bursera frenningae, shrub from type locality, showing numerous reddish-brown-barked stems arising from a common point of origin at ground level.

It is a pleasure to name this unique plant for Mrs. Blanche Borden Frenning, a favorite niece of the late Professor and Mrs. Oakes Ames, who were preeminent in the field of orchidology at Harvard University. Mrs. Frenning, a noted plantswoman in her own right, owns a home on Goat Cay, Great Exuma, where she has hospitably had my wife and me, as well as several of our botanical colleagues, as guests. Her generosity has thus made it possible for us to explore more intensively this rich segment of the Bahama Archipelago. We are, indeed, most grateful to Mrs. Frenning for her friendship and graciousness.

Tea made from the fresh leaves of gumbo-limbo or gum-elemi (Bursera simaruba (L.) Sarg.) is a refreshing drink. However, when I insisted on having tea made from the fresh leaves of B. frenningae, Jack Wright, who works for Mrs. Frenning, was appalled. Jack, whose hobby is carving boats, said that the tea would poison me and that when he once carved a boat from the wood it immediately sank to the bottom when placed in water. I did not drink enough of the tea to be poisoned, but what I did imbibe tasted like oily turpentine.

Additional collections examined. Cat Island: in open coppice near Stevenson, D. S. Correll 46150 (A, BM, F, FTG, IJ, MO, NY); on coppice-covered hills on north edge of Port Howe, D. S. Correll 46222 (A, K, NY). Great Exuma: same location as holotype, D. S. Correll 49927 (A, BM, F, FTG, IJ, K, MO, NY, US). Long Island: in coastal coppice on rolling hills north of Salt Pond, D. S. Correll 48187 (A, DUKE, F, FTG, IJ, NY, TEX).

#### THEOPHRASTACEAE

Jacquinia berteri Sprengel var. nana Correll, var. nov.

Planta plus minusve 1 m. alta, a var. typica differt omnibus partibus minoribus, foliis oblanceolatis plerumque minus quam 2.5 cm. longis et 1 cm. latis, pedicellis gracilibus plerumque circa 5 mm. longis.

Type. Bahamas. Great Inagua, on edge of coppice southeast of road between Matthew Town and Morton Bahamas Ltd. headquarters, just east of Horse Pond; shrub about 1 meter tall, very dense; flowers greenish yellow, July 24, 1976, D. S. Correll 47488 (A, holotype; BM, F, FTG, MO, NY, isotypes).

Plants 1 meter or less tall; leaves oblanceolate, mostly less than 2.5 cm. long and 1 cm. wide; pedicels slender, mostly about 5 mm. long.

## Jacquinia keyensis Mez var. minutifolia Correll, var. nov.

Haec varietas a var. typica differt omnibus partibus minoribus, foliis elliptico-oblanceolatis vel spathulatis plerumque minus quam 2 cm. longis et circa 7 mm. latis, inflorescentia subtili, florum pedicellis gracilibus circa 7 mm. longis, calycibus 1.5 mm. longis.

Type. Bahamas. Great Inagua, scrubland at south end of the Salt Lake, July 7, 1963, H. E. Hackett 202 (DUKE, holotype).

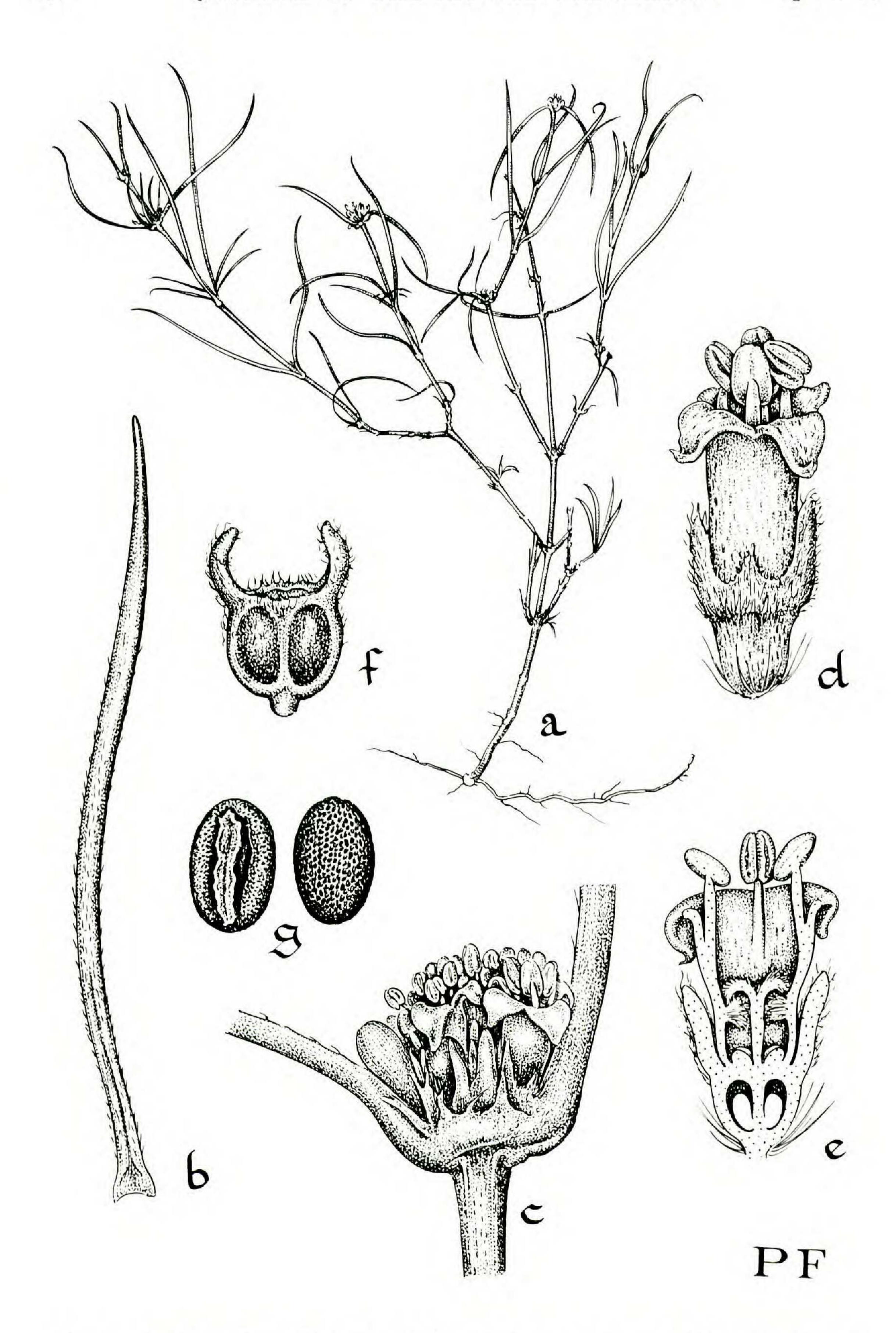


FIGURE 4. Borreria capillaris: a, habit, single stem from multistemmed plant,  $\times$   $\frac{2}{3}$ ; b, leaf,  $\times$  2; c, inflorescence,  $\times$  4; d, flower, natural position,  $\times$  12; e, flower, longitudinal section,  $\times$  12; f, fruit,  $\times$  6; g, seeds, ventral and dorsal views,  $\times$  16. Drawn by Priscilla Fawcett.

Leaves elliptic-oblanceolate to spatulate, mostly less than 2 cm. long and to about 7 mm. wide; inflorescence delicate; flowers with slender pedicels about 7 mm. long and calyces 1.5 mm. long.

## RUBIACEAE

Borreria capillaris Correll, sp. nov.

FIGURE 4.

Herba succulenta, dense et intricate fruticosa, formam globularem faciens, caulibus filiformibus numerosis e radice gracile, usque 4 dm. alta et lata. Internodia plerumque ultra 2.5 cm. longa. Folia opposita, sessilia, filiformia, acuta, usque 5 cm. longa et 1 mm. lata, supra cum vel sine pubescentia adpressa. Flores in capitulis puberulis parvis plerumque minus quam 7 mm. latis e foliorum summorum axilis orti. Calyx puberulus, lobis subaequalibus 2 usque 4. Corolla alba guttis bruneolis; tubus circa 2 mm. longus, lobis 4 triangularibus effusis circa 0.5 mm. longis. Stamina 4, exserta. Semina nigra, ellipsoidea, margaritacea, muriculata.

Type. Caicos Islands. South Caicos, in thin soil on rock flats in somewhat open coppice on ridge between Cockburn Harbour and airport, soft balled shrubby plant; flowers white with brownish specks, February 11, 1978, D. S. Correll 49942 (A, holotype; BM, F, FTG, IJ, MO, NY, TEX, US, isotypes).

Plant succulent, densely and intricately bushy to form a globular mass, with many filiform stems from a slender taproot, to about 4 dm. high and wide; internodes commonly 2.5 cm. or more long. Leaves opposite, sessile, filiform, acute, to about 5 cm. long and 1 mm. wide, with a prominent central vein on lower surface, with or without an appressed puberulence on upper surface. Flowers in small heads in upper leaf axils; heads pubescent, usually less than 7 mm. across. Calyx 1.5–2 mm. long, puberulent, with 2 to 4 subequal subulate lobes that are somewhat shorter than the body. Corolla white with brownish specks; tube about 2 mm. long, with 4 triangular spreading lobes about 0.5 mm. long. Stamens 4, exserted. Seeds black, iridescent, pebbled, ellipsoid, about 1 mm. long.

This species grows in the proximity of the recently discovered Oxalis eggersii Urban (Correll 49284), new to our flora. When growing, the uniformly filiform, succulent, entangled leaves and branches of the plant resemble a ball of hair.

The nearest species with which our plant can be compared is the usually robust *Borreria savannarum* Britton of Great Inagua. It differs from that species, however, in its delicate, slender, succulent stems and leaves.

## ACKNOWLEDGMENTS

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and Turks Islands. The excellent drawings are those of Miss Priscilla Fawcett, Staff Artist of the Fairchild Tropical Garden, to whom I am most grateful. I also wish to thank my wife, Dr. Helen B. Correll, for her contributions to my research, and also those individuals in the islands who have contributed much toward making my field explorations more successful than they would have been otherwise. I wish to acknowledge the assistance of Dennis Wm. Stevenson with the photographs.

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